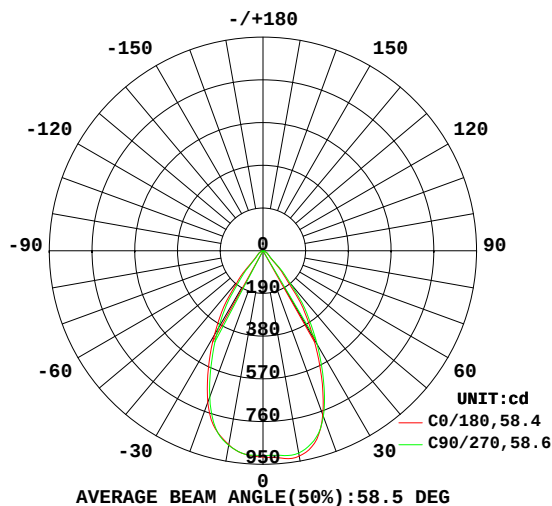


## LUMINAIRE PHOTOMETRIC TEST REPORT

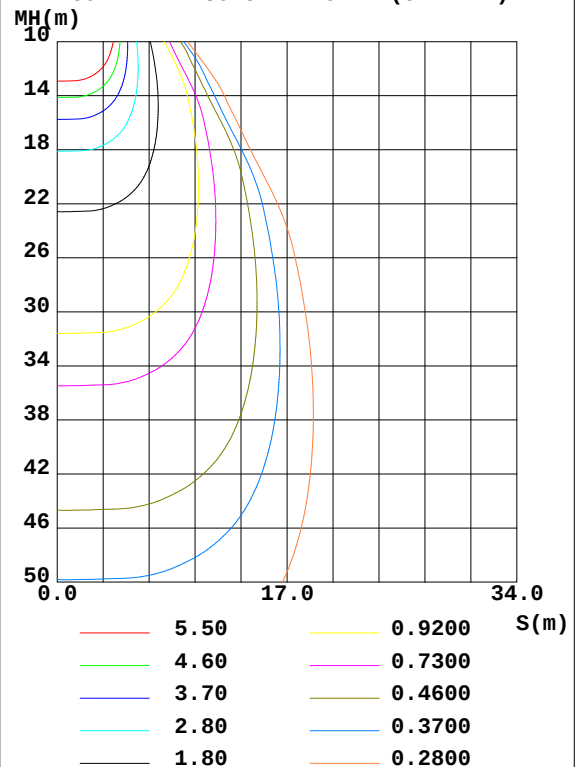
|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |

| DATA OF LAMP     |                  | PHOTOMETRIC DATA Eff: 85.63 lm/W |        |                    |           |
|------------------|------------------|----------------------------------|--------|--------------------|-----------|
| MODEL            | ML12111202 4000K | I <sub>max</sub> (cd)            | 936.0  | S/MH(C0/180)       | 0.89      |
| NOMINAL POWER(W) | 10               | LOR(%)                           | 100.0  | S/MH(C90/270)      | 0.86      |
| RATED VOLTAGE(V) | 220-240          | TOTAL FLUX(lm)                   | 883.23 | η UP, DN(C0-180)   | 0.0, 52.9 |
| NOMINAL FLUX(lm) | 883.228          | CIE CLASS                        | DIRECT | η UP, DN(C180-360) | 0.0, 47.1 |
| LAMPS INSIDE     | 1                | η up(%)                          | 0.0    | CIBSE SHR NOM      | 0.75      |
| TEST VOLTAGE(V)  | 220              | η down(%)                        | 100.0  | CIBSE SHR MAX      | 0.95      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-11-07

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

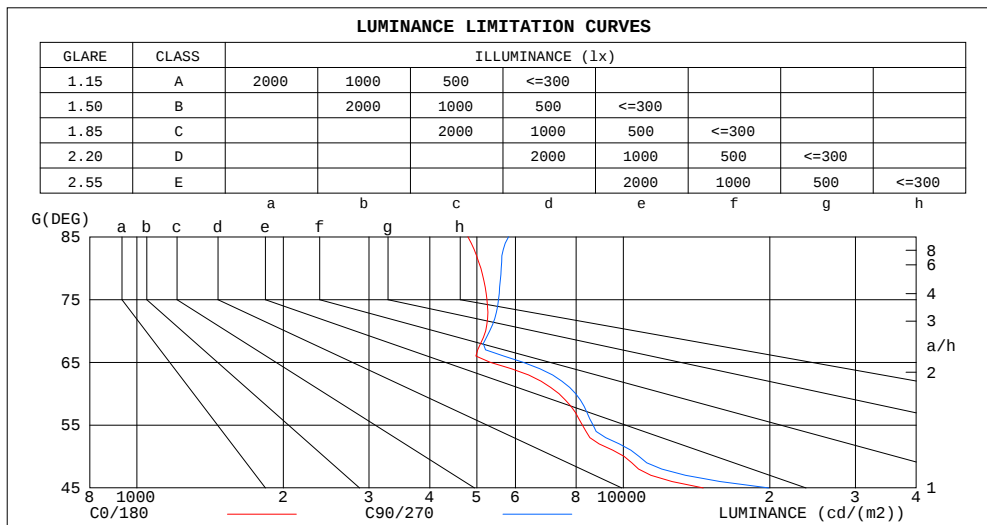
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 927.8                 | 932.5  | 913.9  | 880.9  | 876.5  | 864.1  | 878.9  | 897.2  | 0- 10    | 86.57       | 86.57        | 9.8,9.8    |
| 20       | 777.5                 | 801.5  | 784.5  | 745.2  | 717.8  | 682.5  | 692.8  | 728.0  | 10- 20   | 234.7       | 321.3        | 36.4,36.4  |
| 30       | 450.5                 | 482.3  | 482.5  | 456.2  | 433.9  | 402.5  | 397.1  | 414.6  | 20- 30   | 269.3       | 590.5        | 66.9,66.9  |
| 40       | 154.3                 | 177.9  | 184.3  | 181.8  | 170.5  | 151.2  | 138.2  | 136.3  | 30- 40   | 184.2       | 774.7        | 87.7,87.7  |
| 50       | 36.59                 | 38.89  | 39.27  | 39.10  | 36.93  | 33.99  | 33.08  | 33.95  | 40- 50   | 59.33       | 834.1        | 94.4,94.4  |
| 60       | 20.90                 | 22.17  | 22.62  | 22.63  | 21.46  | 19.90  | 19.30  | 19.77  | 50- 60   | 24.64       | 858.7        | 97.2,97.2  |
| 70       | 10.11                 | 10.31  | 10.30  | 10.35  | 10.31  | 9.873  | 9.595  | 9.596  | 60- 70   | 13.94       | 872.6        | 98.8,98.8  |
| 80       | 5.017                 | 5.441  | 5.522  | 5.488  | 5.089  | 4.537  | 4.321  | 4.410  | 70- 80   | 8.049       | 880.7        | 99.7,99.7  |
| 90       | 0.0965                | 0.2741 | 0.4131 | 0.2664 | 0.0116 | 0.0116 | 0.0116 | 0.0116 | 80- 90   | 2.539       | 883.2        | 100,100    |
| 100      |                       |        |        |        |        |        |        |        | 90-100   |             |              |            |
| 110      |                       |        |        |        |        |        |        |        | 100-110  |             |              |            |
| 120      |                       |        |        |        |        |        |        |        | 110-120  |             |              |            |
| 130      |                       |        |        |        |        |        |        |        | 120-130  |             |              |            |
| 140      |                       |        |        |        |        |        |        |        | 130-140  |             |              |            |
| 150      |                       |        |        |        |        |        |        |        | 140-150  |             |              |            |
| 160      |                       |        |        |        |        |        |        |        | 150-160  |             |              |            |
| 170      |                       |        |        |        |        |        |        |        | 160-170  |             |              |            |
| 180      |                       |        |        |        |        |        |        |        | 170-180  |             |              |            |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2024-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 4794   | 5809    |
| 80                | 5095   | 5609    |
| 75                | 5244   | 5539    |
| 70                | 5214   | 5311    |
| 65                | 5324   | 6223    |
| 60                | 7373   | 7980    |
| 55                | 8236   | 8664    |
| 50                | 10039  | 10775   |
| 45                | 14594  | 19897   |

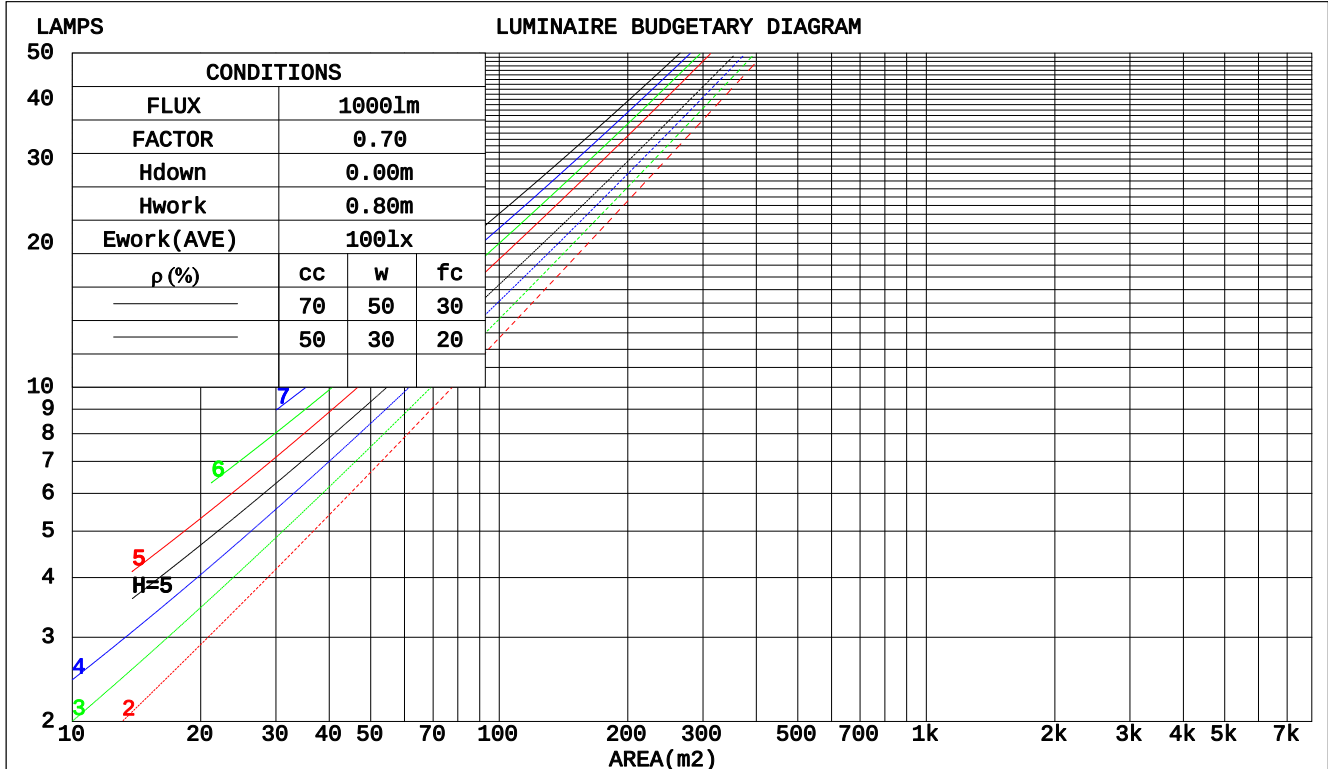
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-11-07

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |

| $\rho_{CC}$           | 80%                             |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0   |
|-----------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| $\rho_W$              | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$           | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0   |
| RCR                   | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| RCR:Room Cavity Ratio |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| 0.0                   | 1.19                            | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0                   | 1.10                            | 1.07 | 1.05 | 1.08 | 1.05 | 1.03 | 1.04 | 1.02 | 1.00 | 1.00 | .98  | .97  | .97  | .95  | .94  | .92 |
| 2.0                   | 1.02                            | .97  | .94  | .90  | .96  | .93  | .97  | .93  | .91  | .94  | .91  | .89  | .91  | .89  | .87  | .85 |
| 3.0                   | .94                             | .89  | .85  | .93  | .88  | .84  | .90  | .86  | .83  | .88  | .84  | .81  | .86  | .83  | .80  | .79 |
| 4.0                   | .88                             | .82  | .77  | .87  | .81  | .77  | .84  | .80  | .76  | .82  | .78  | .75  | .80  | .77  | .74  | .73 |
| 5.0                   | .82                             | .76  | .71  | .81  | .75  | .71  | .79  | .74  | .70  | .77  | .73  | .70  | .76  | .72  | .69  | .67 |
| 6.0                   | .77                             | .70  | .66  | .76  | .70  | .66  | .74  | .69  | .65  | .73  | .68  | .65  | .71  | .67  | .64  | .63 |
| 7.0                   | .72                             | .66  | .61  | .71  | .65  | .61  | .70  | .65  | .61  | .69  | .64  | .60  | .67  | .63  | .60  | .59 |
| 8.0                   | .68                             | .61  | .57  | .67  | .61  | .57  | .66  | .60  | .57  | .65  | .60  | .56  | .64  | .59  | .56  | .55 |
| 9.0                   | .64                             | .58  | .53  | .63  | .57  | .53  | .62  | .57  | .53  | .61  | .56  | .53  | .60  | .56  | .53  | .51 |
| 10.0                  | .60                             | .54  | .50  | .60  | .54  | .50  | .59  | .54  | .50  | .58  | .53  | .50  | .57  | .53  | .50  | .48 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                  |  |  |            |  |                  |
|----------------------------------------------------------------------------------|--|--|------------|--|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |  |  |            |  |                  |
| NAME: DL9453-WH4K10C03                                                           |  |  | TYPE:      |  | WEIGHT:          |
| SPEC.: white RA90                                                                |  |  | DIM.:      |  | SERIAL No.:      |
| MFR.:                                                                            |  |  | SUR.: 85mm |  | Shielding Angle: |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0         | .192                  | .109 | .035 | .186 | .106 | .034 | .173                            | .099 | .032 | .161 | .093 | .030 | .150 | .087 | .028 |   |  |
| 2.0         | .183                  | .101 | .031 | .178 | .098 | .030 | .167                            | .093 | .029 | .157 | .088 | .028 | .148 | .084 | .026 |   |  |
| 3.0         | .174                  | .093 | .028 | .169 | .091 | .027 | .160                            | .087 | .026 | .151 | .083 | .025 | .143 | .079 | .025 |   |  |
| 4.0         | .165                  | .086 | .025 | .161 | .084 | .025 | .153                            | .081 | .024 | .145 | .078 | .024 | .138 | .075 | .023 |   |  |
| 5.0         | .156                  | .080 | .023 | .153 | .078 | .023 | .146                            | .076 | .022 | .139 | .074 | .022 | .133 | .071 | .021 |   |  |
| 6.0         | .149                  | .075 | .021 | .146 | .074 | .021 | .139                            | .071 | .021 | .134 | .069 | .020 | .128 | .068 | .020 |   |  |
| 7.0         | .142                  | .070 | .020 | .139 | .069 | .020 | .133                            | .067 | .019 | .128 | .066 | .019 | .123 | .064 | .019 |   |  |
| 8.0         | .135                  | .066 | .019 | .133 | .065 | .018 | .128                            | .064 | .018 | .123 | .062 | .018 | .119 | .061 | .018 |   |  |
| 9.0         | .129                  | .062 | .017 | .127 | .062 | .017 | .122                            | .061 | .017 | .118 | .059 | .017 | .115 | .058 | .017 |   |  |
| 10.0        | .124                  | .059 | .016 | .122 | .059 | .016 | .118                            | .058 | .016 | .114 | .057 | .016 | .110 | .056 | .016 |   |  |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .172                  | .157 | .144 | .147 | .135 | .124 | .101                                       | .093 | .086 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .158                  | .132 | .111 | .135 | .114 | .096 | .093                                       | .079 | .067 | .053 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0  | .146                  | .114 | .088 | .125 | .098 | .076 | .086                                       | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0  | .136                  | .099 | .071 | .117 | .086 | .062 | .080                                       | .060 | .043 | .046 | .035 | .026 | .015 | .011 | .008 |   |
| 5.0  | .128                  | .088 | .058 | .110 | .076 | .051 | .075                                       | .053 | .036 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0  | .120                  | .078 | .048 | .103 | .068 | .042 | .071                                       | .048 | .030 | .041 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0  | .114                  | .071 | .041 | .098 | .062 | .036 | .068                                       | .043 | .025 | .039 | .025 | .015 | .013 | .008 | .005 |   |
| 8.0  | .108                  | .065 | .035 | .093 | .056 | .031 | .064                                       | .039 | .022 | .037 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0  | .103                  | .060 | .030 | .089 | .052 | .027 | .061                                       | .036 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .098                  | .055 | .027 | .085 | .048 | .023 | .059                                       | .034 | .017 | .034 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                  |               |                  |      |      |            |               |                |                  |      |      |      |
|----------------------------------------------------------------------------------|---------------|------------------|------|------|------------|---------------|----------------|------------------|------|------|------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |               |                  |      |      |            |               |                |                  |      |      |      |
| NAME: DL9453-WH4K10C03                                                           |               |                  |      |      | TYPE:      |               |                | WEIGHT:          |      |      |      |
| SPEC.: white RA90                                                                |               |                  |      |      | DIM.:      |               |                | SERIAL No.:      |      |      |      |
| MFR.:                                                                            |               |                  |      |      | SUR.: 85mm |               |                | Shielding Angle: |      |      |      |
| ceiling/cavity                                                                   | 0.7           | 0.7              | 0.5  | 0.5  | 0.3        | 0.7           | 0.7            | 0.5              | 0.5  | 0.3  |      |
| walls                                                                            | 0.5           | 0.3              | 0.5  | 0.3  | 0.3        | 0.5           | 0.3            | 0.5              | 0.3  | 0.3  |      |
| working plane                                                                    | 0.2           | 0.2              | 0.2  | 0.2  | 0.2        | 0.2           | 0.2            | 0.2              | 0.2  | 0.2  |      |
| Room dimensions                                                                  |               | Viewed crosswise |      |      |            |               | Viewed endwise |                  |      |      |      |
| x = 2H y = 2H                                                                    | 19.9          | 20.9             | 20.1 | 21.0 | 21.2       | 20.2          | 21.3           | 20.5             | 21.4 | 21.6 |      |
|                                                                                  | 3H            | 19.9             | 20.8 | 20.2 | 21.0       | 21.2          | 20.3           | 21.2             | 20.6 | 21.4 | 21.6 |
|                                                                                  | 4H            | 20.0             | 20.9 | 20.3 | 21.1       | 21.3          | 20.4           | 21.2             | 20.6 | 21.5 | 21.7 |
|                                                                                  | 6H            | 20.0             | 20.9 | 20.3 | 21.1       | 21.4          | 20.4           | 21.2             | 20.7 | 21.5 | 21.7 |
|                                                                                  | 8H            | 20.1             | 20.8 | 20.4 | 21.1       | 21.4          | 20.4           | 21.2             | 20.8 | 21.5 | 21.8 |
|                                                                                  | 12H           | 20.1             | 20.8 | 20.4 | 21.1       | 21.4          | 20.5           | 21.2             | 20.8 | 21.5 | 21.8 |
| 4H                                                                               | 2H            | 19.8             | 20.6 | 20.0 | 20.9       | 21.1          | 20.1           | 21.0             | 20.4 | 21.2 | 21.5 |
|                                                                                  | 3H            | 19.9             | 20.7 | 20.2 | 20.9       | 21.2          | 20.3           | 21.0             | 20.6 | 21.3 | 21.6 |
|                                                                                  | 4H            | 20.0             | 20.7 | 20.4 | 21.0       | 21.3          | 20.4           | 21.1             | 20.7 | 21.4 | 21.7 |
|                                                                                  | 6H            | 20.2             | 20.8 | 20.6 | 21.1       | 21.5          | 20.6           | 21.2             | 20.9 | 21.5 | 21.8 |
|                                                                                  | 8H            | 20.3             | 20.8 | 20.7 | 21.2       | 21.5          | 20.6           | 21.2             | 21.0 | 21.5 | 21.9 |
|                                                                                  | 12H           | 20.3             | 20.8 | 20.7 | 21.2       | 21.6          | 20.7           | 21.2             | 21.1 | 21.6 | 22.0 |
| 8H                                                                               | 4H            | 20.0             | 20.6 | 20.4 | 21.0       | 21.3          | 20.4           | 20.9             | 20.8 | 21.3 | 21.7 |
|                                                                                  | 6H            | 20.3             | 20.7 | 20.7 | 21.1       | 21.6          | 20.6           | 21.1             | 21.0 | 21.5 | 21.9 |
|                                                                                  | 8H            | 20.4             | 20.8 | 20.8 | 21.2       | 21.7          | 20.7           | 21.1             | 21.2 | 21.6 | 22.0 |
|                                                                                  | 12H           | 20.5             | 20.8 | 21.0 | 21.3       | 21.7          | 20.9           | 21.2             | 21.3 | 21.6 | 22.1 |
| 12H                                                                              | 4H            | 20.0             | 20.5 | 20.4 | 20.9       | 21.3          | 20.4           | 20.9             | 20.8 | 21.2 | 21.6 |
|                                                                                  | 6H            | 20.3             | 20.7 | 20.7 | 21.1       | 21.6          | 20.6           | 21.0             | 21.1 | 21.4 | 21.9 |
|                                                                                  | 8H            | 20.4             | 20.8 | 20.9 | 21.2       | 21.7          | 20.8           | 21.1             | 21.2 | 21.6 | 22.0 |
| Variations with the observer position at spacings(CIE Pub.117):                  |               |                  |      |      |            |               |                |                  |      |      |      |
| S = 1.0H                                                                         | + 1.8 / - 2.7 |                  |      |      |            | + 2.1 / - 3.0 |                |                  |      |      |      |
| 1.5H                                                                             | + 3.7 / - 2.4 |                  |      |      |            | + 4.1 / - 2.6 |                |                  |      |      |      |
| 2.0H                                                                             | + 1.3 / - 0.7 |                  |      |      |            | + 2.4 / - 0.7 |                |                  |      |      |      |

CIE Pub.117, 883.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)  
Area: 0.00567 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-11-07

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |

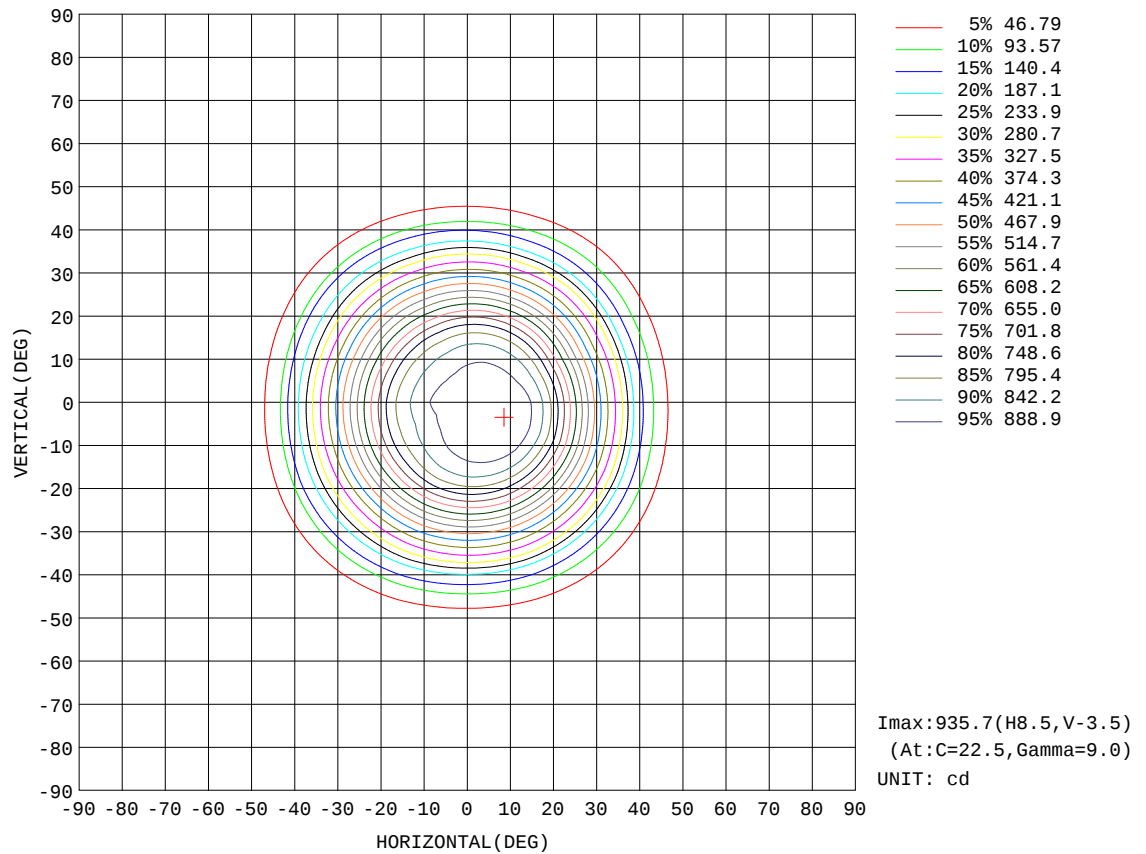
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8                                                 | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5 | 0.5           | 0.5 | 0      |
| Walls                            | 0.7                                                 | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7 | 0.5           | 0.3 | 0      |
| Working plane                    | 0.2                                                 | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 84                                                  | 77  | 73        | 83  | 77  | 73  | 83  | 76            | 73  | 69     |
| 0.80                             | 92                                                  | 85  | 81        | 91  | 85  | 81  | 90  | 84            | 81  | 77     |
| 1.00                             | 97                                                  | 90  | 86        | 96  | 90  | 86  | 94  | 90            | 86  | 81     |
| 1.25                             | 101                                                 | 95  | 91        | 100 | 95  | 91  | 98  | 94            | 90  | 86     |
| 1.50                             | 104                                                 | 99  | 95        | 103 | 98  | 95  | 100 | 96            | 93  | 89     |
| 2.00                             | 107                                                 | 103 | 99        | 106 | 101 | 98  | 103 | 99            | 97  | 91     |
| 2.50                             | 109                                                 | 105 | 102       | 107 | 104 | 101 | 104 | 101           | 99  | 93     |
| 3.00                             | 111                                                 | 107 | 104       | 109 | 106 | 103 | 106 | 103           | 101 | 94     |
| 4.00                             | 113                                                 | 110 | 107       | 111 | 108 | 106 | 107 | 105           | 103 | 96     |
| 5.00                             | 114                                                 | 112 | 110       | 112 | 110 | 108 | 108 | 107           | 105 | 97     |
| ROOM INDEX                       | UF(total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                     |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2024-11-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |

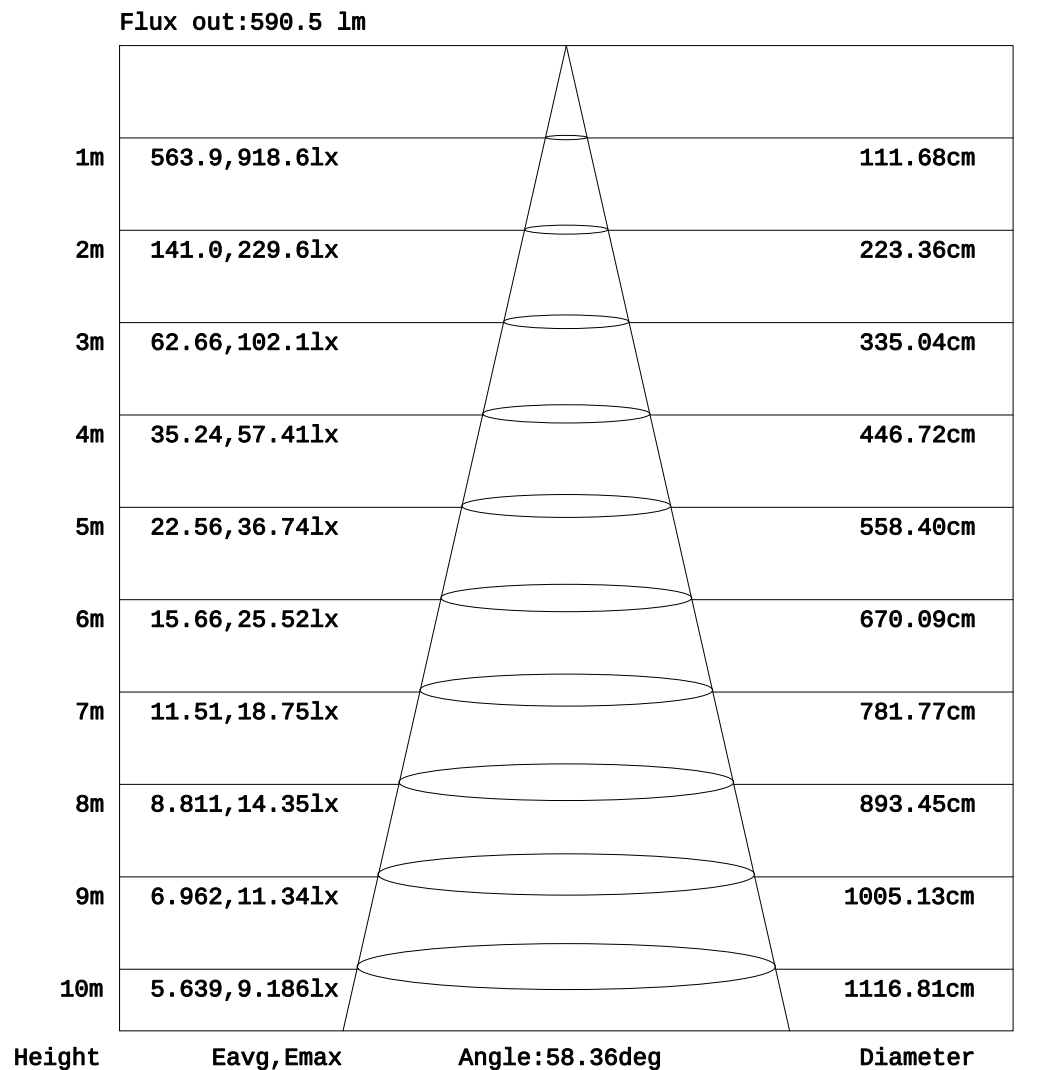


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### AAI Figure

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |



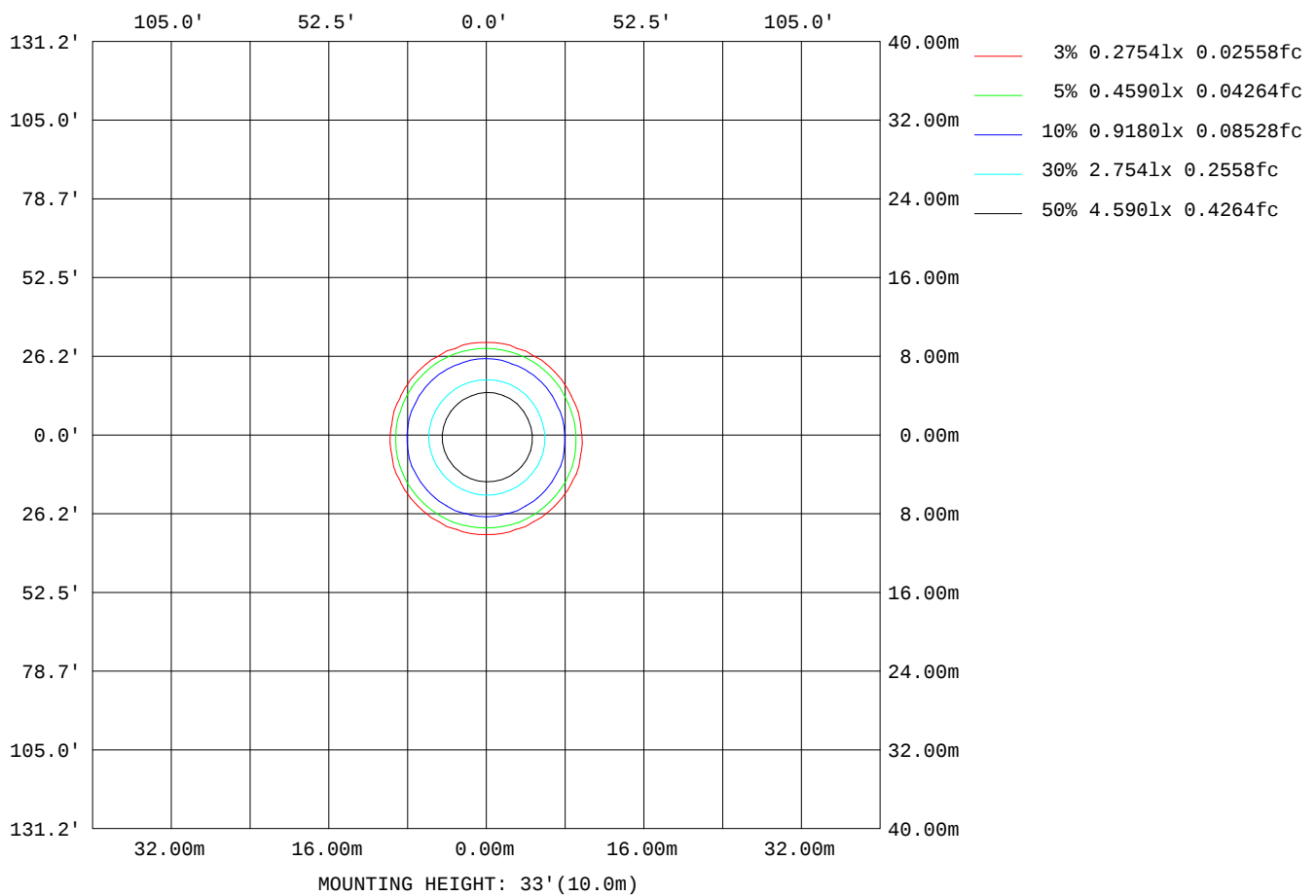
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2024-11-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-11-07

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:230.81V I:0.0462A P:10.314W PF:0.9683 Freq:49.99Hz Lamp Flux:883.228x1 lm |            |                  |
| NAME: DL9453-WH4K10C03                                                           | TYPE:      | WEIGHT:          |
| SPEC.: white RA90                                                                | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 85mm | Shielding Angle: |

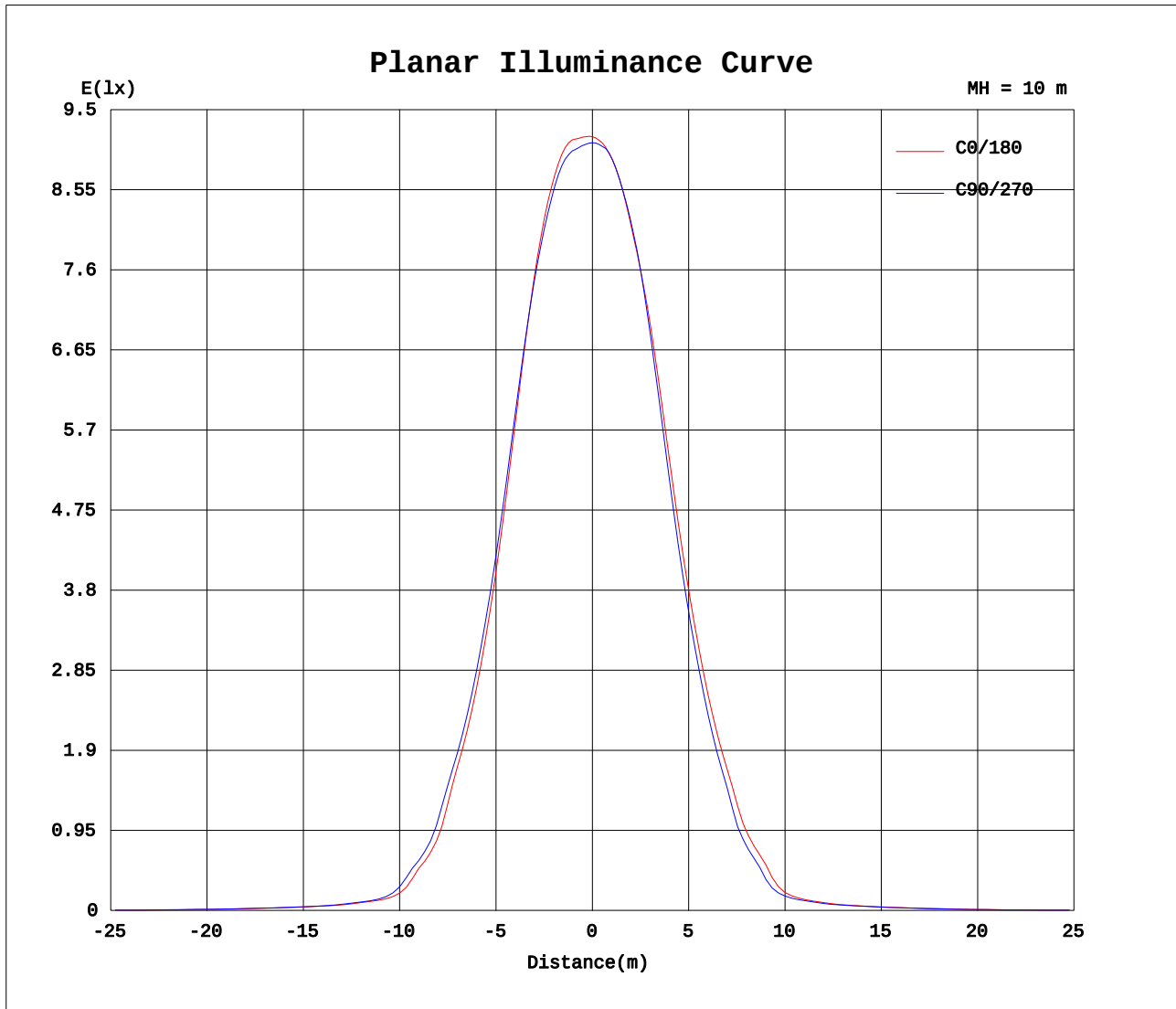
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 5350  |
| L_0~180(75)av  | 5317  |
| L_0~180(85)av  | 4636  |
| L_90~270(65)av | 5486  |
| L_90~270(75)av | 5188  |
| L_90~270(85)av | 4539  |
| L_45(65)av     | 5416  |
| L_45(75)av     | 5231  |
| L_45(85)av     | 4572  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-11-07

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-2000A\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```